

In the Claims: (strikethrough parts deleted and underlined parts added)

1. (Currently Amended) A biomass gasification system, comprising:
a primary combustion chamber;
a secondary combustion chamber fluidly connected to said primary combustion chamber;
a heat exchanger fluidly connected to said secondary combustion chamber; and
a rotating grate rotatably positioned within said primary combustion chamber for supporting the biomass during gasification, wherein said rotating grate is capable of rotating in a continuous rotational manner.

2. (Original) The biomass gasification system of Claim 1, including an oxygen mixer positioned between said primary combustion chamber and said secondary combustion chamber.

3. (Original) The biomass gasification system of Claim 1, including a feeder unit in communication with said primary combustion chamber for delivering biomass onto said rotating grate.

4. (Original) The biomass gasification system of Claim 3, wherein said feeder unit includes a disintegration unit for disintegrating the biomass before entering said primary combustion chamber.

5. (Original) The biomass gasification system of Claim 4, wherein said feeder unit includes a fuel magazine capable of storing a volume of the biomass for inputting biomass into said disintegration unit.

6. (Original) The biomass gasification system of Claim 2, wherein said feeder unit includes a plunger member that pushes the biomass into an opening within said primary combustion chamber onto said rotating grate.

7. (Original) The biomass gasification system of Claim 6, wherein said plunger member moves along a path radial to said rotating grate.

8. (Original) The biomass gasification system of Claim 6, wherein said plunger member has a cyclical action.

9. (Currently Amended) The biomass gasification system of Claim 6, wherein said opening within said primary combustion chamber is surrounded by an input member having a tubular structure, wherein said plunger member is slidably positioned within said input member and wherein a front end of said plunger member extends near an interior of said primary combustion chamber.

10. (Original) The biomass gasification system of Claim 4, wherein said feeder unit includes a conveyor positioned between said disintegration unit and said primary combustion chamber.

11. (Original) The biomass gasification system of Claim 1, wherein said rotating grate includes a plurality of openings within for allowing air to pass upwardly through the biomass positioned upon said rotating grate.

12. (Original) The biomass gasification system of Claim 11, including an air distribution system for forcing air beneath said rotating grate through said openings.

13. (Original) The biomass gasification system of Claim 1, including an ash disposal unit positioned beneath said rotating grate for removing collected ash from said primary combustion chamber.

14. (Currently Amended) The biomass gasification system of Claim 1, wherein said rotating grate includes a plurality of openings within for allowing air to pass

~~upwardly through the biomass positioned upon said rotating grate has a shape and size similar to an interior of said primary combustion chamber.~~

15. (Original) The biomass gasification system of Claim 1, including a drive motor mechanically connected to said rotating grate for rotating said rotating grate.

16. (Currently Amended) A biomass gasification system, comprising:
a primary combustion chamber;
a rotating grate rotatably positioned within said primary combustion chamber, wherein said rotating grate has a substantially planar upper surface for supporting the biomass during gasification, wherein said rotating grate is capable of rotating in a continuous rotational manner; and
a drive motor mechanically connected to said rotating grate for rotating said rotating grate.

17. (Original) The biomass gasification system of Claim 16, including a feeder unit in communication with said primary combustion chamber for delivering biomass onto said rotating grate.

18. (Original) The biomass gasification system of Claim 17, wherein said feeder unit includes a plunger member that pushes the biomass into an opening within said primary combustion chamber onto said rotating grate.

19. (Original) The biomass gasification system of Claim 16, wherein said rotating grate includes a plurality of openings within for allowing air to pass upwardly through the biomass positioned upon said rotating grate.

20. (Original) The biomass gasification system of Claim 16, including an air distribution system for forcing air beneath said rotating grate through said openings.